

Docket: PHD 99,200
Application: 09/868,386

In the Claims:

Please amend the Claims as follows:

1. (Currently Amended) A method with wireless base stations in centrally controlled radio systems, which systems transfer packets and guarantee service quality and comprise a controlling ~~base station~~ access point (AP), mobile terminals (MTs) and stations working as a ~~relay forwarder~~ mobile terminal (FMT) for the connection of a ~~station~~ remote mobile terminal (RMT) not connected to the AP by radio for bidirectional communication between RMT and AP, the FMT maintaining both a connection to the AP and to the RMT by radio, characterized

(a) in that a time-shifted partial frame structure is generated by the FMT based on a system-wide known frame structure of the AP, which partial frame structure is used by the FMT to control the transmission from the FMT to the RMT and back, while the partial frames transport signaling data, useful data and organization data about the structure of the partial frame for controlling the transmission between FMT and RMT to enable a communication between RMT and AP, and

(b) in that the structure of the partial frame is so similar to the frame generated by the AP that an MT, which is designed for the operation at an AP, can also serve as an RMT and permits the exchange of data between RMT and FMT.

2. (Original) A method as claimed in claim 1, characterized in that the organization of the partial frame structures is exclusively effected by a central controller in the AP.

3. (Currently Amended) A method as claimed in claim 1, characterized in that the organization of the partial frame structures is effected by a decentralized control in the ~~relay station~~ forwarder mobile terminal (FMT).

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4. (Currently Amended) A method as claimed in claim 1, characterized in that the organization of the partial frame structures is partly effected by a central controller in the ~~central station~~ access point (AP) and partly by a decentralized controller in the ~~relay station~~ forwarding mobile terminal (FMT).
5. (Currently Amended) A method as claimed in claim 1, characterized in that a mobile terminal (MT) can become ~~the~~ an AP and take over the role of a central station (in so far this is possible with the system), while there are RMTs with respect to the AP.
6. (Currently Amended) A method as claimed in claim 1, characterized in that a cascading of the relay function is possible while a station controlled as an RMT seen from the point of view of an FMT can simultaneously be an FMT with respect to another station, and in the original partial frame structure further partial frame structures are recursively formed of which ~~the~~ a depth corresponds to ~~the~~ a number of the hops used between the AP and the most remote RMT in the cascade.
7. (Currently Amended) A method as claimed in claim 1, characterized in that ~~a central station~~ an access point (AP) can cover a plurality of mobile terminals (MT) and ~~relay stations~~ forwarder mobile terminals (FMT) while each MT can have the functionality of an FMT.
8. (Previously Presented) A method as claimed in claim 1, characterized in that the FMT can simultaneously cover a plurality of RMTs.
9. (Previously Presented) A method as claimed in claim 1, characterized in that the assignment of the capacity for the relay path in the time domain (TDMA) can be effected in suitable systems, but also in the frequency domain (FDMA) or code domain (CDMA).

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10. (Previously Presented) A method as claimed in claim 1, characterized in that there may be a plurality of FMTs that simultaneously cover their associated RMTs in various areas of the cell, while partial frames are simultaneously transmitted at different spots in the cell.

11. (Currently Amended) A method as claimed in claim 1, characterized in that the length of the frames of the AP and partial frames of the FMT can dynamically vary and be different.

12. (Currently Amended) A method as claimed in claim 1, characterized in that ~~the~~ an arrangement of ~~the~~ individual phases in the partial frames is dynamically changed, divided, can partly fail and new phases can additionally be defined.

13. (Previously Presented) A method as claimed in claim 1, characterized in that a direct exchange of data is effected between the associated RMTs by controlling a common FMT.

14. (Currently Amended) A method as claimed in claim 1, characterized in that a direct exchange of data is effected between the MT, controlled by the AP, and the RMT, controlled by the associated FMT.

15. (Previously Presented) A method as claimed in claim 1, characterized in that a point-to-multipoint mode is used for transferring useful data.